

WHAT IS CLAIMED IS:

1. A liposome preparation that comprises an SDI molecule.
- 5        2. The liposome preparation of claim 1 comprises:
  - (a) a mixture of a polycationic and a neutral lipid; and
  - (b) an SDI molecule selected from the group consisting of SDI-1 protein and an SDI-1-encoding nucleic acid molecule.
- 10        3. The liposome preparation of claim 2, wherein said polycationic lipid is 2,3-dioleyloxy-N-[2(sperminecarboxamido)-ethyl]-N,N-dimethyl-1-propanaminium-trifluoroacetate (DOSPA).
- 15        4. The liposome preparation of claim 2, wherein said neutral lipid is dioleoylphosphatidylethanolamine (DOPE).
- 20        5. The liposome preparation of claim 3, wherein said neutral lipid is dioleoylphosphatidylethanolamine (DOPE).
- 25        6. The liposome preparation of claim 5, wherein said polycationic and a neutral lipid are present in said liposome in a 3:1 (w/w) mixture.
- 30        7. The liposome preparation of claim 1, wherein said SDI molecule is an SDI-1 protein.
- 35        8. The liposome preparation of claim 1, wherein said SDI molecule is an SDI-1-encoding nucleic acid molecule.
- 30        9. The liposome preparation of claim 8, wherein said SDI-1-encoding nucleic acid molecule is operably linked to a promoter, but is separated from said operably linked promoter by a non-translated intervening polynucleotide.

10. The liposome preparation of claim 8, wherein said SDI-1-encoding nucleic acid molecule is operably linked to a promoter, and contains a non-translated intervening polynucleotide which separates a region of said SDI-1-encoding nucleic acid that encodes part of SDI-1 from a region of said SDI-1-encoding nucleic acid that encodes a different part of SDI-1.

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11. A method for preparing a liposome preparation of SDI molecules which comprises incubating liposomes that comprise a mixture of a polycationic and a neutral lipid with an SDI molecule selected from the group consisting of SDI-1 protein and an SDI-1-encoding nucleic acid molecule.

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12. A method of providing an SDI molecule to a cell which comprises:

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(A) contacting said cell with a liposome preparation that comprises a mixture of a polycationic and a neutral lipid and an SDI molecule selected from the group consisting of SDI-1 protein and an SDI-1-encoding nucleic acid molecule; and

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(B) permitting the intracellular delivery of said SDI-1 molecule of said liposome preparation.

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13. An SDI-1-encoding nucleic acid molecule, operably linked to a promoter, but separated from said operably linked promoter by a non-translated intervening polynucleotide.

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14. A method of transcribing an SDI-1-encoding nucleic acid molecule which comprises:

(A) providing to a cell said SDI-1-encoding nucleic acid molecule, operably linked to a promoter, but separated from said operably linked promoter by a non-translated intervening polynucleotide; and

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(B) permitting said promoter to mediate the transcription of said SDI-1-encoding nucleic acid molecule.

15. A nucleic acid molecule that encodes SDI-1, a fragment of SDI-1, an SDI-1 fusion protein or a mimetic or analog of SDI-1.

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10     17. A method for treating a disease of undesired cellular proliferation which comprises providing to a recipient a nucleic acid molecule that encodes SDI-1, a fragment of SDI-1, an SDI-1 fusion protein, an SDI-1 mimetic, or an analog of SDI-1.

15     18. A method for treating a disease of undesired cellular proliferation which comprises providing to a recipient a protein or polypeptide capable of inhibiting DNA synthesis in a recipient cell, wherein said protein or polypeptide is SDI-1, a fragment of SDI-1, an SDI-1 fusion protein or a mimetic or analog of SDI-1.

20     19. A method for treating a disease of undesired cellular quiescence which comprises providing to a recipient a nucleic acid molecule that encodes an inhibitor of SDI-1.

25     20. A method for treating a disease of undesired cellular quiescence which comprises providing to a recipient a protein, polypeptide, or organic molecule capable of inhibiting SDI-1.